

CLAIMS

.What is claimed is:

1. A system that facilitates communication between an industrial control device and a remote user device, comprising:
 - an industrial control device that monitors information related to an industrial automation environment;
 - a processor that receives information from the industrial control device, determines whether a trigger condition exists, and selectively constructs and transmits at least one pager message to the remote user device if a trigger condition exists.
2. The system of claim 1, the processor receives programming information from the remote user device in response to the at least one pager message and constructs and transmits a programming message to the industrial control device.
3. The system of claim 1, the remote user device is at least one of a telephone, cellular telephone, a personal desktop assistant (PDA), a personal computer, a laptop computer, and a pager.
4. The system of claim 1, the at least one pager message comprises at least one text string.
5. The system of claim 1, the industrial control device is a programmable logic controller (PLC).
6. The system of claim 1, the processor and the remote user device communicate *via* at least one of a Telocator Alphanumeric Paging protocol and an ASCII protocol.

7. A method for communicating between an industrial control device and a remote user device, comprising:

- receiving information related to an industrial automation environment from the industrial control device;

- determining whether received information indicates a trigger condition;

- associating a data variable with an extant trigger condition;

- selectively constructing a pager message comprising a text string and the data variable; and

- transmitting the pager message to the remote user device.

8. The method of claim 7, further comprising permitting a user transmit a programming message *via* the remote user device.

9. The method of claim 8, the programming message comprises information associate with resetting at least one value determinative of a trigger condition.

10. The method of claim 8, at least one of the pager message and the programming message is constructed and transmitted *via* at least one of a Telocator Alphanumeric Paging protocol and an ASCII protocol.

11. The method of claim 8, further comprising translating the programming message to a communications protocol that is readable by the industrial control device.

12. The method of claim 11, further comprising reprogramming the industrial control device according to the translated programming message.

13. The method of claim 8, further comprising permitting the user to selectively direct translation and transmission of the programming message to the industrial control device to effect reprogramming of the industrial control device *via* the remote control device.

14. A system that facilitates communication between an industrial control device and a remote user device and selective reprogramming of the industrial control device, comprising:

means for detecting extant trigger conditions in an industrial automation environment;

means for translating information indicative of the extant trigger condition into at least one pager message; and

means for transmitting the at least one pager message to a remote user device to alert a user to the extant trigger condition.

15. The system of claim 14, further comprising means for reprogramming the industrial control device *via* the remote user device.

16. The system of claim 15, the means for reprogramming the industrial control device comprising means for receiving, translating, and transmitting a programming message from the remote user device to the industrial control device.

17. The system of claim 14, the at least one pager message comprising at least one text string and a data variable associated with the extant trigger condition.